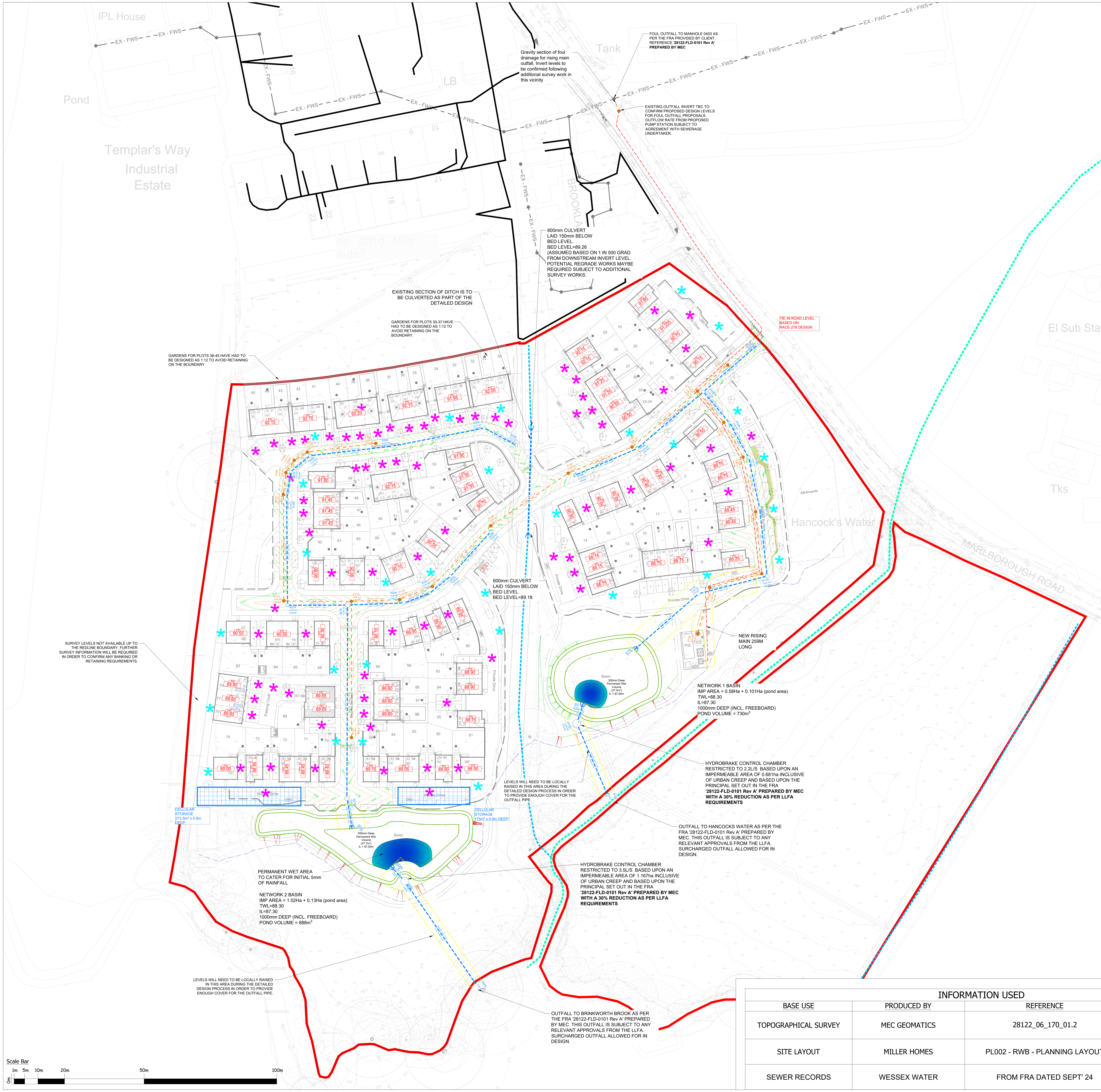

IPL House
Pond
Templar's Way
Industrial
Estate
Tank
LB
BROOKLA
EX - FWS
no data this side?
El Sub Sta
Tks
Hancock's Water
MARLBOROUGH ROAD
90.8m
Allotments
Private Drive
Parking Court
Basin
300mm Deep Permanent Wet Volume (27.5m³) IL = 87.00m
300mm Deep Permanent Wet Volume (47.7m³) IL = 87.00m
P/S
TIE IN ROAD LEVEL BASED ON RACE 278 DESIGN
CELLULAR STORAGE 273.5m² x 0.8m DEEP
CELLULAR STORAGE 175m² x 0.8m DEEP
Scale Bar
0m
1m
5m
10m
20m
50m
100m

FOUL OUTFALL TO MANHOLE 0403 AS PER THE FRA PROVIDED BY CLIENT. REFERENCE **'28122-FLD-0101 Rev A' PREPARED BY MEC**

Gravity section of foul drainage for rising main outfall. Invert levels to be confirmed following additional survey work in this vicinity

EXISTING OUTFALL INVERT TBC TO CONFIRM PROPOSED DESIGN LEVELS FOR FOUL OUTFALL PROPOSALS. OUTFLOW RATE FROM PROPOSED PUMP STATION SUBJECT TO AGREEMENT WITH SEWERAGE UNDERTAKER.

600mm CULVERT
LAID 150mm BELOW
BED LEVEL.
BED LEVEL=89.26
(ASSUMED BASED ON 1 IN 500 GRAD FROM DOWNSTREAM INVERT LEVEL. POTENTIAL REGRADE WORKS MAYBE REQUIRED SUBJECT TO ADDITIONAL SURVEY WORKS.

EXISTING SECTION OF DITCH IS TO BE CULVERTED AS PART OF THE DETAILED DESIGN

GARDENS FOR PLOTS 30-37 HAVE HAD TO BE DESIGNED AS 1:12 TO AVOID RETAINING ON THE BOUNDARY.

GARDENS FOR PLOTS 38-45 HAVE HAD TO BE DESIGNED AS 1:12 TO AVOID RETAINING ON THE BOUNDARY.

SURVEY LEVELS NOT AVAILABLE UP TO THE REDLINE BOUNDARY. FURTHER SURVEY INFORMATION WILL BE REQUIRED IN ORDER TO CONFIRM ANY BANKING OR RETAINING REQUIREMENTS.

600mm CULVERT
LAID 150mm BELOW
BED LEVEL.
BED LEVEL=89.18

NEW RISING MAIN 259M LONG

NETWORK 1 BASIN
IMP AREA = 0.58Ha + 0.101Ha (pond area)
TWL=88.30
IL=87.30
1000mm DEEP (INCL. FREEBOARD)
POND VOLUME = 730m^3

HYDROBRAKE CONTROL CHAMBER RESTRICTED TO 2.2L/S BASED UPON AN IMPERMEABLE AREA OF 0.681ha INCLUSIVE OF URBAN CREEP AND BASED UPON THE PRINCIPAL SET OUT IN THE FRA **'28122-FLD-0101 Rev A' PREPARED BY MEC WITH A 30% REDUCTION AS PER LLFA REQUIREMENTS**

LEVELS WILL NEED TO BE LOCALLY RAISED IN THIS AREA DURING THE DETAILED DESIGN PROCESS IN ORDER TO PROVIDE ENOUGH COVER FOR THE OUTFALL PIPE.

OUTFALL TO HANCOCKS WATER AS PER THE FRA '28122-FLD-0101 Rev A' PREPARED BY MEC. THIS OUTFALL IS SUBJECT TO ANY RELEVANT APPROVALS FROM THE LLFA. SURCHARGED OUTFALL ALLOWED FOR IN DESIGN.

HYDROBRAKE CONTROL CHAMBER RESTRICTED TO 3.5L/S BASED UPON AN IMPERMEABLE AREA OF 1.167ha INCLUSIVE OF URBAN CREEP AND BASED UPON THE PRINCIPAL SET OUT IN THE FRA **'28122-FLD-0101 Rev A' PREPARED BY MEC WITH A 30% REDUCTION AS PER LLFA REQUIREMENTS**

PERMANENT WET AREA TO CATER FOR INITIAL 5mm OF RAINFALL

NETWORK 2 BASIN
IMP AREA = 1.02Ha + 0.13Ha (pond area)
TWL=88.30
IL=87.30
1000mm DEEP (INCL. FREEBOARD)
POND VOLUME = 888m^3

LEVELS WILL NEED TO BE LOCALLY RAISED IN THIS AREA DURING THE DETAILED DESIGN PROCESS IN ORDER TO PROVIDE ENOUGH COVER FOR THE OUTFALL PIPE.

OUTFALL TO BRINKWORTH BROOK AS PER THE FRA '28122-FLD-0101 Rev A' PREPARED BY MEC. THIS OUTFALL IS SUBJECT TO ANY RELEVANT APPROVALS FROM THE LLFA. SURCHARGED OUTFALL ALLOWED FOR IN DESIGN.

GENERAL NOTES

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL LEVELS GIVEN IN METRES ABOVE ORDNANCE DATUM (m AOD).
3. ALL OTHER DIMENSIONS IN MILLIMETRES, UNLESS OTHERWISE STATED.
4. ALL SLAB LEVELS ARE +/- 475mm AND ARE SUBJECT TO DETAILED ENGINEERING DESIGN.
5. ALL DRAINAGE SHOW IS INDICATIVE AND SUBJECT TO DETAILED ENGINEERING DESIGN & TECHNICAL APPROVALS.
6. ATTENUATION SIZED FOR STORM RUNOFF FROM DEVELOPMENT AREAS BASED UPON INFORMATION PROVIDED.
7. MAXIMUM GARDEN GRADIENT OF 1:20
8. ALLOWANCES FOR RETAINING FEATURES (INCLUDING RETAINING WALLS, EXPOSED BRICKWORK, TANKING ETC) MADE AT THIS STAGE SUBJECT TO DETAILED DESIGN. SLAB LEVELS INDICATED REFLECT PROPOSED LEVEL DIFFERENCES AT THIS STAGE OF THE PRELIMINARY DESIGN.
9. PART M APPROACH TO THE FRONT DOOR UNLESS IDENTIFIED DIFFERENTLY.
10. NO ALLOWANCE HAS BEEN MADE TO CATER FOR SW OR FW FLOWS THROUGH THE SITE FROM OTHER AREAS.
11. ALL INFRASTRUCTURE WORKS WITH REGARDS TO HIGHWAY LEVELS, S278 & S106 WORKS HAVE BEEN ASSUMED AND ARE SUBJECT TO DETAILED DESIGN.
12. DEVELOPER TO REVIEW & CONFIRM THAT EACH OUTFALL LOCATION AND HIGHWAY CONNECTION HAS ALL LEGAL RIGHTS TO CONNECT TO AS INDICATED AND ALSO ENSURE THAT NO RANSOM SCENARIO OCCURS TO ENABLE EACH CONNECTION.

PROPOSED SUDS FEATURES

[SUBJECT TO APPROVAL]

FILTER DRAINS	*
PERMEABLE PAVING	*

GENERAL SITE INFORMATION

SITE AREA = 4.79Ha

DEVELOPMENT AREAS = 1.93Ha [Western Parcel]
1.16Ha [Eastern Parcel]

MAX IMPERMEABLE AREA (including a 10% for Urban Creep)
1.167Ha [Western Parcel]
0.681Ha [Eastern Parcel]

THESE IMPERMEABLE AREAS ARE INDICATIVE AND WILL BE SUBJECT TO DETAILED DESIGN; HOWEVER THEY ASSIST INDICATING HOW THE DRAINAGE STRATEGY CAN BE IMPLEMENTED ON THIS DEVELOPMENT.

95 HABITABLE DWELLINGS (SUBJECT TO RECEIPT OF A DETAILED LAYOUT & DETAILED ENGINEERING DESIGN.

DRAINAGE PROPOSALS ARE BASED ON THE FLOOD RISK ASSESSMENT PREPARED BY MEC [REF' 28122-FLD-0101 Rev A' WHEN THE DETAILED DESIGN IS COMPLETED A DEVELOPER ENQUIRY WILL BE NEEDED. UPON RECEVING THE DEVELOPER ENQUIRY, CLARIFICATION WILL BE NEEDED THAT THE PROPOSED STORM AND FOUL OUTFALL LOCATIONS ARE ACCEPTABLE (TO BE CONFIRMED BY WESSEX WATER, THE ENVIRONMENT AGENCY & LLFA).

DETERMINE DISCHARGE FROM SITE

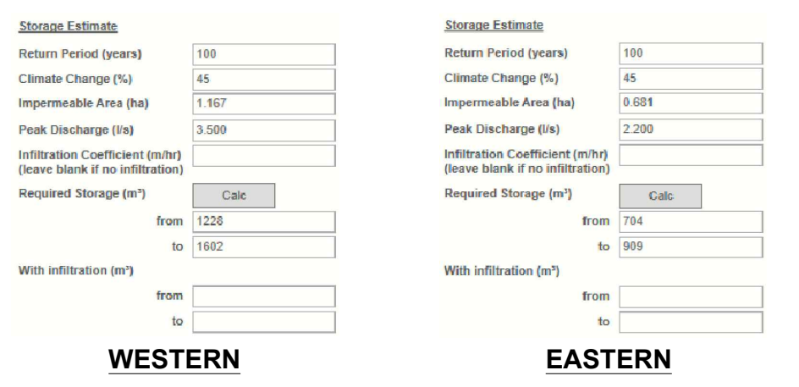
DISCHARGE FROM THE PROPOSED DEVELOPMENT IS PROPOSED TO DRAIN VIA TWO CONTROL CHAMBERS INTO THE EXISTING WATERCOURSES BRINKWORTH BROOK (WESTERN PARCEL) AND HANCOCKS WATER (EASTERN PARCEL) .

AN EXISTING DITCH COURSE RUNS THROUGH THE CENTRE OF THE SCHEME, WHICH EFFECTIVELY DIVIDES THE SITE INTO 2 CATCHMENTS [EASTERN & WESTERN] .

THE DISCHARGE FROM EACH OF THESE CATCHMENTS IS TO BE RESTRICTED TO THE DISCHARGE RATES FOR EACH PARCEL AS SET OUT IN THE FRA PREPARED BY MEC [REF'28122-FLD-0101 Rev A' WITH A 30% REDUCTION IN LINE WITH LLFA REQUIREMENTS. THESE ARE 3.5l/s FOR THE WESTERN PARCEL AND 2.2 l/s FOR THE EASTERN PARCEL. WHICH IS EQUIVALENT TO THE QBAR RATE OF 8.2l/s WITH A 30% REDUCTION THAT WAS DETERMINED TO THE WHOLE SCHEME.

DETERMINE STORAGE VOLUMES

AS SHOWN IN THE DRAINAGE STRATEGY THERE IS A SUDS ATTENUATION FEATURE PROPOSED FOR EACH CATCHMENT WHICH WILL BE USED STORE AND DISCHARGE THE WATER FROM THE PROPOSED DEVELOPMENT. THE SIZE OF THE ATTENUATION HAS BEEN INDICATED BASED UPON THE OUTFLOW RATES DISCUSSED ABOVE AND THE BELOW STORAGE CALCULATIONS FOR EACH CATCHMENT



Storage Estimate	WESTERN	EASTERN
Return Period (years)	100	100
Climate Change (%)	45	45
Impermeable Area (ha)	1.167	0.681
Peak Discharge (l/s)	3.500	2.200
Infiltration Coefficient (m/hr) (leave blank if no infiltration)		
Required Storage (m³) from	1228	704
to	1602	909
With infiltration (m³) from		
to		

THE ABOVE CALCULATIONS ARE BASED ON RESTRICTING THE FLOWS FORM SITE FOR ALL EVENTS UP TO AND INCLUDING THE 100yr + 45% ALLOWANCE FOR CLIMATE CHANGE [IN ACCORDANCE WITH DEFRA CLIMATE CHANGE ALLOWANCES SET OUT IN THE MEC FRA [REF'28122-FLD-0101 Rev A']

AVERAGE STORAGE REQUIRED = 1415m^3 [Western Parcel]
807m^3 [Eastern Parcel]

FOUL DISCHARGE FROM SITE

THE POSITION AND METHOD OF FOUL OUTFALL IS SUBJECT TO APPROVAL AND IS BASED ON THE FRA PRODUCED BY MEC [REF '**28122-FLD-0101 Rev A**']

DUE TO SITE LEVELS AND DRAINING FOUL FLOWS FROM THE WESTERN PARCEL UNDER THE EXISTING WATER-COURSE IT IS NECESSARY TO UTILISE AN ADOPTABLE PUMPING STATION TO RECEIVE GRAVITY FLOWS FROM THE DEVELOPMENT AND THEN DISCHARGE THEM INTO THE PUBLIC GRAVITY FOUL SEWER IN MARLBOROUGH ROAD.

ALL DRAINAGE PROPOSALS ARE SUBJECT TO THE RELEVANT APPROVALS AND NO CONNECTIONS SHOULD BE MADE PRIOR TO FULL APPROVAL.

BOTH SURFACE AND FOUL WATER DESIGNS SHOULD BE IN ACCORDANCE WITH WESSEX WATER REQUIREMENTS

The Contractor is to check and verify all building and site dimensions, levels and sewer invert levels at connection points before work starts. The Contractor is to comply in all respects with current Building Legislation, British Standard Specifications , Building Regulations, Construction (Design & Management) Regulations, Party Wall Act, etc. whether or not specifically stated on this drawing. This drawing must be read with and checked against any structural, geotechnical or other specialist documentation provided. This drawing is not intended to show details of foundations, ground conditions or ground contaminants. Each area of ground relied upon to support any structure depicted (including drainage) must be investigated by the Contractor. A suitable method of foundation should be provided allowing for existing ground conditions. Any suspect or fluid ground, contaminates on or within the ground, should be further investigated by a suitable expert. Any earthwork constructions shown indicate typical slopes for guidance only & should be further investigated by a suitable expert. Where existing trees / structures are to be retained they should be subject to a full specialist inspection for safety. All trees are to be planted so as to ensure they are a minimum of 5 metres from buildings. A suitable method of foundation is to be provided to accommodate the proposed tree planting. Residential & Commercial Engineering Limited do not accept any responsibility for any losses (financial or otherwise) to any Client or third party arising out of the Clients (be it Developer or Contractor but not limited thereto) non-compliance with afore mentioned provisos.

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INFORMATION USED

BASE USE	PRODUCED BY	REFERENCE	RECEIVED
TOPOGRAPHICAL SURVEY	MEC GEOMATICS	28122_06_170_01.2	3.9.25
SITE LAYOUT	MILLER HOMES	PL002 - RWB - PLANNING LAYOUT	27.04.26
SEWER RECORDS	WESSEX WATER	FROM FRA DATED SEPT' 24	3.9.25

STORM Network 1

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	170	Circular	26.922	S102	88.12	89.45	S104	87.96	90.13
1.001	450	382	Circular	15.287	S104	87.74	90.13	S106	87.70	90.00
1.002	450	384	Circular	14.958	S106	87.70	90.00	S108	87.66	89.79
1.003	525	450	Circular	19.366	S108	87.58	89.79	S110	87.54	89.54
1.004	525	454	Circular	25.856	S110	87.54	89.54	S112	87.48	89.18
1.005	525	455	Circular	26.697	S112	87.48	89.18	S114	87.43	88.75
1.006	525	455	Circular	32.007	S114	87.43	88.75	S116	87.36	
2.000	225	169	Circular	25.535	S126	88.69	90.50	S128	88.54	90.18
2.001	375	57	Circular	32.794	S128	88.39	90.18	S104	87.81	90.13
3.000	600	10	Circular	8.094	S118	87.30		S120	86.49	89.05
3.001	225	167	Circular	28.872	S120	86.49	89.05	S122	86.32	

FOUL Network 1

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	150	150	Circular	26.029	F101	89.20	92.33	F103	89.03	91.85
1.001	150	150	Circular	5.817	F103	89.03	91.85	F105	88.99	91.71
1.002	150	150	Circular	5.560	F105	88.99	91.71	F107	88.95	91.59
1.003	150	150	Circular	8.312	F107	88.95	91.59	F109	88.89	91.39
1.004	150	150	Circular	40.099	F109	88.89	91.39	F111	88.63	90.42
1.005	150	13	Circular	25.523	F111	88.63	90.42	F113	86.65	90.11
1.006	150	150	Circular	18.116	F113	86.65	90.11	F115	86.53	89.88
1.007	150	150	Circular	13.322	F115	86.52	89.88	F117	86.43	89.82
1.008	150	150	Circular	31.722	F117	86.43	89.82	F119	86.22	90.53
1.009	150	150	Circular	35.347	F119	86.22	90.53	F121	85.98	90.55
1.010	150	150	Circular	25.990	F121	85.98	90.55	F123	85.81	90.18
1.011	150	150	Circular	32.431	F123	85.81	90.18	F125	85.59	90.17
1.012	150	150	Circular	15.438	F125	85.59	90.17	F127	85.49	90.02
1.013	150	150	Circular	14.930	F127	85.49	90.02	F129	85.39	89.81
1.014	150	150	Circular	21.138	F129	85.39	89.81	F131	85.25	89.52
1.015	150	150	Circular	23.457	F131	85.25	89.52	F133	85.09	89.20
1.016	150	150	Circular	20.334	F133	85.09	89.20	F135	84.96	88.75
1.017	150	150	Circular	17.907	F135	84.96	88.75	F137	84.84	87.61
2.000	150	150	Circular	51.352	F139	87.00	89.43	F113	86.66	90.11
3.000	150	11	Circular	15.061	F141	87.00	89.79	F125	85.59	90.17

STORM Network 2

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	167	Circular	13.641	S202	89.85	91.27	S204	89.77	91.63
1.001	300	238	Circular	35.345	S204	89.69	91.63	S206	89.54	92.34
1.002	300	238	Circular	31.146	S206	89.54	92.34	S208	89.41	91.88
1.003	300	239	Circular	9.570	S208	89.41	91.88	S210	89.37	91.63
1.004	375	279	Circular	10.599	S210	89.30	91.63	S212	89.26	91.36
1.005	375	87	Circular	39.789	S212	89.26	91.36	S214	88.80	90.40
1.006	375	25	Circular	22.641	S214	88.80	90.40	S216	87.88	90.12
1.007	750	499	Circular	72.848	S216	87.51	90.12	S218	87.36	89.14
1.008	750	500	Circular	11.503	S218	87.36	89.14	S220	87.34	
2.000	225	40	Circular	22.406	S228	89.06	90.48	S230	88.50	89.92
2.001	225	51	Circular	10.119	S230	88.50	89.92	S232	88.30	89.80
2.002	300	238	Circular	10.302	S232	88.22	89.80	S234	88.18	89.86
2.003	375	95	Circular	21.298	S234	88.11	89.86	S216	87.88	90.12
3.000	750	10	Circular	7.814	S220A	87.30		S222	86.52	89.05
3.001	225	57	Circular	46.948	S222	86.52	89.05	S224	85.70	

Rev	Description	Date	Drawn	Check
2	Added scale bar as requested by LPA	15:05:26	REH	#
1	Drawing updated with the latest layout received 27.04.26 and amended following client comments received 27.04.26.	28.04.26	RG	#

Revisions:

Drawing Status:
FOR PLANNING.

Client:
MILLER HOMES (SW)

Project:
ROYAL WOOTTON BASSETT

Title:
DRAINAGE STRATEGY PLAN

Job Number. RACE/MSW/RWB
Drawing No. ENG_003
Revision. 2

Scale: 1:500 @ A0
Date: APR ' 26
Drawn by: APJ
Checked by: #

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